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<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number (Optional) 22188-06985	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on <u>April 28, 2008</u> via facsimile Signature <u>Barbara Richnavsky</u> Typed or printed name <u>Barbara Richnavsky</u>		Application Number 10/526,738	Filed March 4, 2005
		First Named Inventor Jared S. Timko	
		Art Unit 3753	Examiner John Bastianelli
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.  This request is being filed with a notice of appeal.  The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.			
I am the <input type="checkbox"/> applicant/inventor. <input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96) <input checked="" type="checkbox"/> attorney or agent of record. 45,115 Registration number _____ <input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____		<u>Kenneth J. Smith</u> Signature Kenneth J. Smith Typed or printed name 216-622-8674 Telephone number April 28, 2008 Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.			
<input type="checkbox"/> *Total of _____ forms are submitted.			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/526,738  
Applicant : Jared Timko et al.  
Filed : March 4, 2005  
TC/A.U. : 3753  
Examiner : John Bastianelli

Confirmation No. 7877  
Docket No. 22188/06985  
Customer No. 24024

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## REASONS FOR REQUESTING PRE-APPEAL BRIEF REVIEW

Sir:

These Reasons for Requesting Pre-Appeal Brief Review are being submitted concurrently with a Notice of Appeal, and a Pre-Appeal Brief Request for Review. Applicants respectfully request consideration of these reasons for requesting Pre-Appeal Brief Review.

Claim Status

Claims 38-42, 44, 46-48, 50-52, 59-68 and 72-81 are pending in this application.

The claims are rejected as being obvious in view of U.S. Patent No. 3,599,932 to Scaramucci or Scaramucci modified in view of U.S. Patent No. 3,192,943 to Moen, U.S. Patent No. 4,423,749 to Schmitt, U.S. Patent No. 5,595,206 to Soria Vega, U.S. Patent Number 4,911,408 to Kemp and/or U.S. Patent No. 3,066,909 to Reed, Jr.

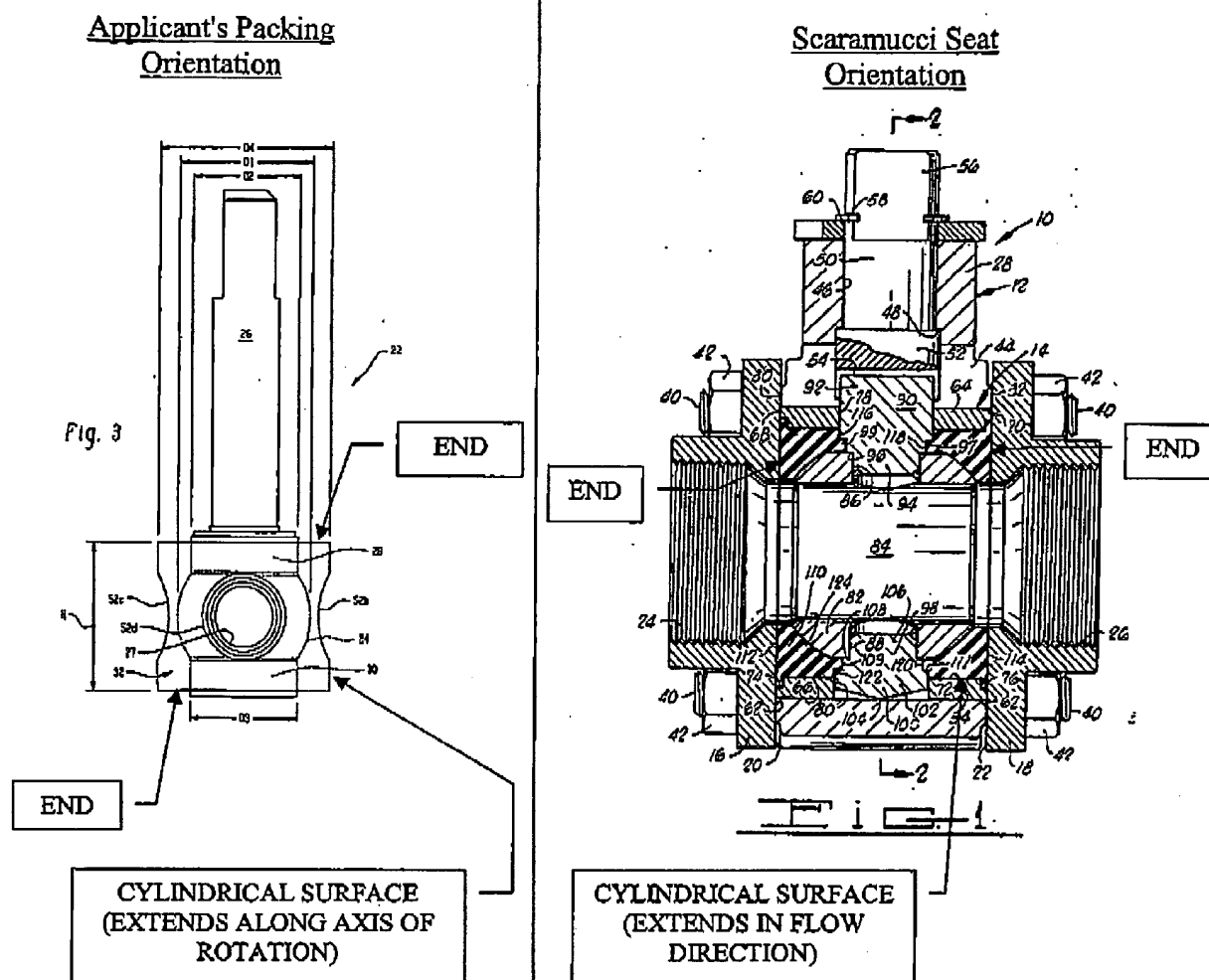
Scaramucci Cannot be Modified to Have the Claimed H/D4 Ratio

Claims 41, 66, 78 and 79 recite a packing with a height H and a diameter D4, such that the ratio H/D4 is 0.75 to 0.85. Claims 42 and 46 recite that H/D4 is about 0.8. Claims 80 and 81 depend from claims 41 and 66 respectively and recite that the height H of the packing is the distance the packing extends along the axis of rotation of the valve element.

As Applicant pointed out in the response filed on October 16, 2007, the orientation of the Scaramucci packing makes it impossible for the dimensions of the Scaramucci packing to be modified to have the claimed H/D4 ratio. See Response Filed Oct. 16, 2007, p.16. The seat of Scaramucci extends laterally, instead of having an upright orientation. Id. As such, the height of the Scaramucci packing along the axis of rotation of the valve element is the diameter of the packing. Id. Annotated Fig. 3 from Applicant's disclosure and annotated Fig. 1 of the Scaramucci patent are presented below to illustrate this point.

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Referring to Fig. 3 of Applicant's disclosure, the cylindrical surface of Applicant's packing extends in the direction of the axis of rotation of the valve element 26. Referring to Fig. 1 of Scaramucci, the cylindrical surface extends in the direction of flow, not along the axis of rotation of the valve member. See also, Scaramucci Figs. 2 and 5-8. Referring to Figure 1 and column 5, lines 1-10 of Scaramucci, the valve seat 110 has ends 112, 114 that engage faces 20 and 22 of the flanges 16 and 18. The cylindrical outer surface of the valve seat 110 is bounded by the valve body 64 that extends between the face 20 and the face 22. The height H (the distance the packing extends along the axis of rotation of the valve element) of the Scaramucci valve seat 110 is the diameter of the valve seat. Even if the dimensions of the Scaramucci valve seat 110 could be arbitrarily changed, there are no dimensions or changes to height and width of the valve seat 110 that would cause the seat to have the claimed  $H/D4$  ratio. No matter what dimensions the Scaramucci valve seat 110 might have, the height over diameter ratio of the seat

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110 will be 1 (one), because the height and diameter of the valve seat 110 are the same dimension.

**None of the References Disclose the Claimed H/D4 Range**

The Office Action asserts that the Schmitt patent discloses a packing with an H/D4 ratio of 0.75 – 0.85. Applicant respectfully submits that the Schmitt patent is silent as to the ratio of the height to the width of the packing. Applicant pointed out in the Oct. 16, 2007 Response:

The Office Action asserts that U.S. Patent Number 4,423,749 to Schmitt teaches a packing with a height to diameter ratio H/D4 of about 0.8. Applicant has thoroughly reviewed the Schmitt reference and points out that there is no packing height to diameter ratio of 0.75 to 0.85 disclosed by the Schmitt reference.

**None of the References Disclose the Claimed D3/D1 Range**

Claims 38, 72 and 78 recite a ball having a diameter D1 and a trunnion having a diameter D3, such that a ratio D3/D1 is 0.7 to 0.9. Claim 46 recites that D3/D1 is about 0.8.

The Office Action asserts that Moen discloses a valve element with a ball diameter to trunnion diameter ratio that meets the claimed D3/D1 ratio. Applicant respectfully disagrees. Moen is silent as to the ratio of D3/D1. Applicant pointed out in the Oct. 16, 2007 Response:

The Office Action asserts that U.S. patent number 3,199,943 to Moen discloses a ball to trunnion ratio D3/D1 ratio of about 0.8. Applicant has thoroughly reviewed the Moen reference and points out that there is no teaching of a ball to trunnion ratio D3/D1 of 0.7 to 0.9.

**No Reasons for Modifying Scaramucci to Have the CLAIMED Ratios are Provided**

The Office Action admits that Scaramucci is silent as to the H/D4 and the D3/D1 ratios. Further, the Office Action has articulated no reason why Scaramucci should be modified to include a seat that meets the *claimed* H/D4<sup>1</sup> ratio or a valve member that meets the *claimed* D3/D1 ratio.

With respect to the H/D4 ratio, the Office Action asserts that it would be obvious to make the Scaramucci packing **wider than taller** to provide better sealing due to more compressible material around the point of contact of fluid flow and seal. Applicant points out that the Office Action provides no factual basis for this assertion. Even if this assertion were accepted, modifying Scaramucci to have a packing that is **wider than taller** does not meet the recited H/D4 ratio of 0.75 to 0.85. There are an infinite number of possible **wider than taller** packings

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<sup>1</sup> As discussed above, the dimensions of the Scaramucci valve seat cannot be changed to meet the claimed H/D4 ratio.

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that are not in the claimed H/D4 range. The Office Action has articulated no reason why, out of the infinite number of possible packings that are **wider than taller**, Scaramucci should be modified to have Applicant's recited H/D4 ratio.

With respect to the D3/D1 ratio, the Office Action asserts that it would be obvious to make the Scaramucci **trunnion almost as wide as the ball** in order to make machining the valve element easier as less material would need to be removed from the ball part of the valve to form the trunnion. Applicant points out that the Office Action provides no factual basis this assertion. Even if this assertion were accepted, modifying Scaramucci to have a **trunnion almost as wide as the ball** does not meet the recited D3/D1 ratio of 0.7 to 0.9. There are an infinite number of possible **trunnions almost as wide as the ball**, that are not in the claimed D3/D1 range. The Office Action has articulated no reason why, out of the infinite number of possible **trunnions almost as wide as the ball**, Scaramucci should be modified to have Applicant's D3/D1 ratio.

Any rejection under 35 U.S.C. 103 requires a clear articulation of the reasons why the **claimed** invention would have been obvious. *MPEP* 2142; *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396. The Office Action has set forth no reason why Scaramucci should be modified to include the **claimed** H/D4 ratio or the **claimed** D3/D1 ratio.

**Reed Jr. Does not Disclose a Trunnion Spaced Apart from a Counterbore**

Claims 63 recites that a bottom end of a lower trunnion is spaced apart along the rotational axis of the valve element from a counterbore. The Office Action asserts that U.S. Patent No. 3,066,909 to Reed, Jr. discloses a lower trunnion spaced apart from a reduced counterbore. Applicant respectfully disagrees. Reed, Jr. discloses a plug valve. The valve element does not include any trunnion and, therefore, does not disclose a trunnion spaced apart from a counterbore.

**Office Action has Not Established that it would be Obvious to Space the Scaramucci Trunnion Apart from the Valve Body**

The Office Action asserts that it would be obvious to modify Scaramucci such that the lower trunnion is spaced apart from the counterbore in order to **keep the valve from breaking if a large force happened to be provided in the downward direction**. Applicant respectfully points out that the Office Action has provided absolutely no support for this contention and submits that the modification proposed by the Office Action would make the valve more likely

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to break, not less likely. The Scaramucci patent discloses that the metal<sup>2</sup> element 98 is in contact with the metal housing 28. As a result, when a large force is provided in the downward direction, the large force is supported by the metal element 98 acting against the metal housing 28. If the metal element 98 were moved away from the metal 28 housing as the Office Action suggests, the hypothetical large force would be carried by the elastomeric seat, which also must perform its sealing function. Applicant respectfully submits that the Office Action has not established that it is known in the art that the valve of Scaramucci would somehow be stronger (and not more likely to leak) if the support by the metal components is removed and valve element is instead supported by the elastomeric seat.

**Kemp Does Not Disclose the Live Loading in the Valve Cavity**

Claim 65 recites a packing that seals against a valve element in a valve cavity that is live loaded in a direction of the axis of rotation of the valve element. *Prima Facie* obviousness of claim 65 has not been established, because the Office Action does not address this claim element.

The Office Action asserts that Kemp discloses live loading a packing in a direction of the axis of rotation. However, the Office Action does not assert that Kemp discloses live loading of a packing in the valve cavity. The only packing 70 of Kemp that is live loaded in the direction of the axis of rotation does not seal against the valve element in the valve cavity.

As explained above, the Scaramucci valve seat 110 is cylindrical and extends in the direction of flow, not along the axis of rotation of the valve member. As a result, live loading of the Scaramucci valve seat 110 would require a complete redesign of the valve seat and most, if not all, other components of the valve. The Office Action has not established that it would be obvious to one having skill in the art to modify Scaramucci to have the valve seat 110 be live loaded in the direction of the axis of rotation.

Respectfully submitted,

CALFEE, HALTER & GRISWOLD LLP

By Kenneth J. Smith 4/28/2008  
Kenneth J. Smith  
Reg. No. 45,115

<sup>2</sup> As indicated by at least the section lines in Scaramucci.